APPENDIX B

System Specifications

Physical Specifications

Table B-1 lists the physical dimensions and requirements for the MGX 8260 media gateway.

Table B-1 MGX 8260 Physical Specifications

Description	Specifications
Number of Card Slots	16 per chassis
Dimensions	(H x W x D) **Chassis:** 24.5 in. x 17.5 in. x 18 in. (62.23 cm x 44.45 cm x 45.72 cm) (14 RU) **Plenum:** 3.5 in. x 17.25 in. x 16.63 in. (8.89 cm x 43.82 cm x 42.24 cm) (2 RU) **AC/DC power supply (option):** 5.25 in. x 17 in. x 13 in. (13.34 cm x 43.18 cm x 33.02 cm) **Shipping container:** 38 in. x 27.5 in. x 27.5 in. (96.5 cm x 70 cm x 70 cm) (3 RU)
Mounting	19 in. and 23 in. rack-mount
Clearance Requirements	36 in. (91 cm) front and rear
Weight	Varies according to card configuration. **Maximum weight** (all card slots populated): 170 lbs (77.11 kg)

Power Specifications

Table B-2 lists the power specifications for the MGX 8260 media gateway.

Table B-2 MGX 8260 Power Specifications

Description	Specifications
Input	**DC (standard option):** –40 VDC to –56 VDC
Consumption	1800 watts (fully loaded)

Environmental Specifications

Table B-3 lists the environmental specifications for the MGX 8260 media gateway.

Table B-3 MGX 8260 Environmental Specifications

Description	Specifications
Storage	–40˚F to 158˚F (–40˚C to 70˚C)
Operating	**Normal:** 41˚F to 104˚F (5˚C to 40˚C) **Short-term:** 23˚F to 122˚F (–5˚C to 50˚C)
Humidity	**Normal:** 5% to 85% relative humidity, noncondensing **Short-term:** 5% to 90%, not to exceed 0.024 kg of water/kg of dry air
Cooling	Forced air and redundant managed fans
Heat Load	6200 BTUs (fully loaded)
Safety and Emissions	FCC Part 15 Class A, 68 EN 55022, 60950 (TUV/VDE), 50082-1, EN 300 386-2 UL 1950 CAS 22.2 No. 950 NEBS Level 3 Bellcore GR-1089-CORE, Bellcore GR-63-CORE
Monitoring and Alarms	Temperature of chassis and each card Voltage on backplane and each card Fan speed

System Control Card Specifications

Table B-4 lists System Control Card (SCC) design specifications for the MGX 8260 media gateway.

Table B-4 MGX 8260 SCC Design Specifications

Description	Specifications
CPU	RISC 5000
Memory	128 MB DRAM or 256 MB DRAM 2 MB Flash
Flash Disk Drive	220 MB (non-volatile RAM drive)

Switching Fabric and Interfaces

Table B-5 lists the switching fabric and interface specifications for the MGX 8260 media gateway.

Table B-5 MGX 8260 Switching Fabric and Interface Specifications

Description	Specifications
Switching fabric	5 Gbps
Distribution Matrix Card (DMC)	Supports up to six channelized T3 TDM interfaces per card (acting as an M13 MUX for the NSC cards) Up to 2 cards per system (slots 7 and 8)
Narrowband Services Card (NSC)	16 T1/E1 TDM interfaces per card with up to 16 D-channels per card for PRI (NFAS) configuration. RJ-21X and RJ-48 modules available for T1/E1 network connections.
Narrowband Services Card (NSC) DSP module	Static and dynamic jitter buffer (10 ms to 200 ms) Configurable echo cancellation (G.165/G.168) DTMF tone generation and detection G.711, G.726, G.729a voice encoding Fax/modem detection and by-pass Voice Activity Detection (VAD) with Silence Suppression and Comfort Noise Generation (CNG)
System Control Card (SCC)	Four 100BASE-T module Four ATM OC-3 module Two 10BASE-T management ports Two RS232 (EIA-574) console ports BITS clock connection Alarm connection
Broadband Service Card (BSC)	6 DS3 interfaces per card (SMB connectors) 3/1/0 functionality and TDM switching between ports Up to 6 cards per system (slots 11-16)
Clocking	BITS External (incoming digital trunk) Internal Stratum 4

Supported Protocols

Table B-6 lists the protocols supported by the MGX 8260 media gateway.

Table B-6 MGX 8260 Supported Protocols

Description	Specifications
WAN	T1, E1 T3 ISDN PRI (separate licensing required per BSC) Q.931 SS7 messaging via D-channels
LAN	10BASE-T Ethernet Fast Ethernet (100BASE-TX) ATM over single-mode or multi-mode (optional) fiber OC-3 interface (to MGX 8850 only)
Codecs	G.711 G.726 G.729a
Call Processing	IPDC, MGCP
Management	SNMP (v1)

Redundancy

Table B-7 lists the redundancy specifications for the MGX 8260 Media Gateway.

Table B-7 MGX 8260 Redundancy Specifications

Description	Specifications
SCC	1:1
BSC	1:1
DMC	1:1
NSC	1:N
Power	1:1